



## U. S. GEOLOGICAL SURVEY GROUND-WATER QUALITY NOTES

NWIS RECORD NO \_\_\_\_\_

STATION NO. \_\_\_\_\_ SAMPLE DATE \_\_\_\_ - \_\_\_\_ - \_\_\_\_ SAMPLE START TIME (CLOCK) \_\_\_\_\_  
STATION NAME \_\_\_\_\_ LOCAL WELL NO. \_\_\_\_\_ END TIME (CLOCK) \_\_\_\_\_  
MEAN SAMPLE TIME (CLOCK) \_\_\_\_\_ TIME DATUM (eg. EST, EDT, UTC) \_\_\_\_\_  
SAMPLING TEAM \_\_\_\_\_ TEAM LEAD SIGNATURE \_\_\_\_\_ DATE \_\_\_\_ / \_\_\_\_ / \_\_\_\_  
SAMPLE MEDIUM \_\_\_\_\_ SAMPLE TYPE \_\_\_\_\_ PURPOSE OF SITE VISIT (50280) \_\_\_\_\_ SAMPLE PURPOSE (71999) \_\_\_\_\_ (15 - NAWQA)  
PROJECT ACCOUNT \_\_\_\_\_ - \_\_\_\_\_ PROJECT NAME \_\_\_\_\_

QC SAMPLE COLLECTED? Equip Blank \_\_\_\_\_ Field Blank \_\_\_\_\_ Sequential \_\_\_\_\_ Spike \_\_\_\_\_ Trip Blank \_\_\_\_\_ Other \_\_\_\_\_  
NWIS RECORD NOS. \_\_\_\_\_

FIELD ID \_\_\_\_\_ LABORATORY INFORMATION  
SAMPLES COLLECTED: NUTRIENTS \_\_\_\_\_ MAJOR IONS \_\_\_\_\_ TRACE ELEMENTS: filtered \_\_\_\_\_ unfiltered \_\_\_\_\_ MERCURY \_\_\_\_\_ MICROBIOLOGY \_\_\_\_\_  
ORGANICS: filtered \_\_\_\_\_ unfiltered \_\_\_\_\_ PEST \_\_\_\_\_ VOC \_\_\_\_\_ DOC \_\_\_\_\_ RADIOCHEMICALS: filtered \_\_\_\_\_ unfiltered \_\_\_\_\_ ISOTOPES \_\_\_\_\_ OTHER \_\_\_\_\_  
RADON \_\_\_\_\_ (Radon samp coll time: \_\_\_\_\_) TPC \_\_\_\_\_ (vol filtered \_\_\_\_\_ mL) TPC \_\_\_\_\_ (vol filtered \_\_\_\_\_ mL) PIC \_\_\_\_\_ (vol filtered \_\_\_\_\_ mL) OTHER \_\_\_\_\_  
LABORATORY SCHEDULES: \_\_\_\_\_  
LAB CODES: \_\_\_\_\_ ADD/DELETE \_\_\_\_\_ ADD/DELETE \_\_\_\_\_ ADD/DELETE \_\_\_\_\_ ADD/DELETE \_\_\_\_\_ ADD/DELETE \_\_\_\_\_ ADD/DELETE \_\_\_\_\_  
COMMENTS: \_\_\_\_\_ DATE SHIPPED \_\_\_\_ / \_\_\_\_ / \_\_\_\_

FIELD MEASUREMENTS  
STATIC WATER LEVEL (72019) \_\_\_\_\_ ft pH (00400) \_\_\_\_\_ units BICARBONATE (00453) \_\_\_\_\_ mg/L  
FLOW RATE (00059) \_\_\_\_\_ gpm COND (00095) \_\_\_\_\_  $\mu$ S/cm@25 °C CARBONATE (00452) \_\_\_\_\_ mg/L  
PUMP DEPTH (00003) \_\_\_\_\_ ft TEMP, AIR (00020) \_\_\_\_\_ °C HYDROXIDE (71834) \_\_\_\_\_ mg/L  
DIS. OXYGEN (00300) \_\_\_\_\_ mg/L TEMP, WATER (00010) \_\_\_\_\_ °C E. COLI ( ) \_\_\_\_\_ COL/100mL  
BAROMETRIC PRES. (00025) \_\_\_\_\_ mm Hg TURBIDITY (61028) \_\_\_\_\_ NTU FECAL COLIFORM (31625) \_\_\_\_\_ COL/100mL  
DO SAT. (00301) \_\_\_\_\_ % ALKALINITY ( ) \_\_\_\_\_ mg/L TOTAL COLIFORM (31501) \_\_\_\_\_ COL/100 mL  
DISSOLVED SULFIDE, MEASURED( 99118) \_\_\_\_\_ MG/L HYDROGEN SULFIDE ODOR DETECTED? (71875) YES NO EH (00090) \_\_\_\_\_ MVOLTS  
METHOD: HACH CHEMETRICS ELECTRODE SAMPLE ACIDIFIED BEFOREHAND? YES NO  
ANC ( ) \_\_\_\_\_ MG/L OTHER: \_\_\_\_\_

SAMPLING INFORMATION  
Sampler Type (84164) \_\_\_\_\_ Sampler ID \_\_\_\_\_ Sampling Method (82398) \_\_\_\_\_ Sampling Condition (72006) \_\_\_\_\_  
Sampler Material: STAINLESS STEEL PVC TEFLON OTHER \_\_\_\_\_ Tubing Material: TEFLON PLASTIC TYGON COPPER OTHER \_\_\_\_\_  
Aquifer name \_\_\_\_\_ Depth pump set at: \_\_\_\_\_ ft BLW LSD Time pumped before sampling (72004) \_\_\_\_\_ MIN.  
Sampling point description \_\_\_\_\_  
GW Color \_\_\_\_\_ GW Clarity \_\_\_\_\_ GW Odor \_\_\_\_\_ Sample in contact with: ATMOSPHERE OXYGEN NITROGEN OTHER \_\_\_\_\_  
Weather: **SKY**- CLEAR PARTLY CLOUDY CLOUDY **PRECIP**- LIGHT MEDIUM HEAVY SNOW RAIN MIST **WIND**- CALM LIGHT BREEZE GUSTY WINDY EST. WIND SPEED \_\_\_\_\_  
**TEMP**- VERY COLD WARM HOT **COMMENTS** \_\_\_\_\_  
OBSERVATIONS \_\_\_\_\_

COMPILED BY \_\_\_\_\_ CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_

## WELL DATA

WELL\_\_\_\_ SPRING\_\_\_\_ MONITOR\_\_\_\_ SUPPLY\_\_\_\_ OTHER\_\_\_\_

SUPPLY WELL PRIMARY USE: DOMESTIC\_\_\_\_ PUBLIC SUPPLY\_\_\_\_ IRRIGATION\_\_\_\_ OTHER\_\_\_\_

Comments: \_\_\_\_\_

Altitude: \_\_\_\_\_ ft Casing Material: \_\_\_\_\_

Measuring Point: \_\_\_\_\_ ft ABV BLW LSD Well Depth, ft blw LSD \_\_\_\_\_

Static Water Level, ft blw LSD \_\_\_\_\_ Date measured \_\_\_\_/\_\_\_\_/\_\_\_\_

Water level status \_\_\_\_\_ \* Water level method \_\_\_\_\_ (for list of options, see page 8)

\*leave this field blank if wl measured represents a static level

Pumping Water Level, ft blw LSD \_\_\_\_\_

**Casing Volume (gal) = 0.0408 X (D)<sup>2</sup> (H) OR Casing Volume = H X F**

H = Height (ft) of water column

F = Casing Volume Factor (see table below)

D = Inside Diameter (in) of well

N = Number of well volumes to be removed during purging

H = Well Depth — Static water Level = \_\_\_\_\_

Diameter, inside, in. = \_\_\_\_\_

1 Casing Volume, gal. = \_\_\_\_\_

**Actual Purge Volume = (Casing Volume ) X (N) = \_\_\_\_\_**

Screened/Open Interval: TOP \_\_\_\_\_ ft blw LSD

BOTTOM \_\_\_\_\_ ft blw LSD

Depth to Top of Sample Interval, ft blw LSD \_\_\_\_\_

Depth to Bottom of Sample Interval, ft blw LSD \_\_\_\_\_

Allowable Drawdown, ft \_\_\_\_\_

**Depth to Water and Well Depth**

	1ST	2ND	3R (optional)
Time			
Hold (for DTW)			
– Cut			
= DTW from MP			
– Measuring point (MP)			
= DTW from LSD			
Hold (for well depth)			
+ Length of tape leader			
= Well depth below MP			
– MP			
= Well depth below LSD			

**Depth to set pump from MP (all units in feet) :**

Distance to top of screen from LSD	
+ MP	
– (7 to 10 x dia. of the well)	
= Depth to pump from MP	
<b>Depth to pump from LSD (all units in feet) :</b>	
– MP	
= Depth pump set from LSD	

## VOLUME FACTORS

DIAMETER (in.)	CASING VOL. FACTOR (F)
1.0	0.04
1.5	0.09
2.0	0.16
3.0	0.37
4.0	0.65
4.5	0.83
5.0	1.02
6.0	1.47
8.0	2.61
10.0	4.08
12.0	5.88
24.0	23.5
36.0	52.9

DIGITAL PHOTO OF SITE CAN BE INSERTED HERE

**METER CALIBRATIONS/FIELD MEASUREMENTS**

**TEMPERATURE** METER MAKE/MODEL \_\_\_\_\_ S/N \_\_\_\_\_ THERMISTOR S/N \_\_\_\_\_ THERMOMETER ID \_\_\_\_\_

Lab Tested against NIST Thermometer/Thermistor? Y N DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_ ± \_\_\_\_\_ °C

Measurement Location : FLOW-THRU CHAMBER SINGLE POINT AT \_\_\_\_\_ ft blw LSD VERTICAL AVG. OF \_\_\_\_\_ POINTS

FIELD READING # 1 \_\_\_\_\_ # 2 \_\_\_\_\_ # 3 \_\_\_\_\_ # 4 \_\_\_\_\_ # 5 \_\_\_\_\_ **MEDIAN:** \_\_\_\_\_ °C REMARK \_\_\_\_\_ QUALIFIER \_\_\_\_\_

**pH** Meter MAKE/MODEL \_\_\_\_\_ S/N \_\_\_\_\_ Electrode No. \_\_\_\_\_ Type: GEL LIQUID OTHER \_\_\_\_\_

Sample: FILTERED UNFILTERED FLOW-THRU CHAMBER SINGLE POINT AT \_\_\_\_\_ ft blw LSD VERTICAL AVG. OF \_\_\_\_\_ POINTS

pH BUFFER	BUFFER TEMP	THEO- RETICAL pH FROM TABLE	pH BEFORE ADJ.	pH AFTER ADJ.	SLOPE	MILLI- VOLTS
pH 7						
pH 7						
pH ____						
pH ____						
pH ____						
CHECK pH ____						

TEMPERATURE CORRECTION FACTORS  
FOR BUFFERS APPLIED? Y N

BUFFER LOT NUMBERS : pH 7: \_\_\_\_\_

pH \_\_\_\_: \_\_\_\_\_

CHECK pH \_\_\_\_: \_\_\_\_\_

BUFFER EXPIRATION DATES: pH 7: \_\_\_\_/\_\_\_\_/\_\_\_\_

pH \_\_\_\_: \_\_\_\_/\_\_\_\_/\_\_\_\_

CHECK pH \_\_\_\_: \_\_\_\_/\_\_\_\_/\_\_\_\_

FIELD READING # 1 \_\_\_\_\_ # 2 \_\_\_\_\_ # 3 \_\_\_\_\_ # 4 \_\_\_\_\_ # 5 \_\_\_\_\_ **USE:** \_\_\_\_\_ units REMARK \_\_\_\_\_ QUALIFIER \_\_\_\_\_

**SPECIFIC CONDUCTANCE** Meter MAKE/MODEL \_\_\_\_\_ S/N \_\_\_\_\_ Sensor Type: DIP CUP FLOW-THRU OTHER \_\_\_\_\_

Sample: FLOW-THRU CHAMBER SINGLE POINT AT \_\_\_\_\_ ft blw LSD VERTICAL AVG. OF \_\_\_\_\_ POINTS

STD VALUE μS/cm	STD TEMP	SC BEFORE ADJ.	SC AFTER ADJ.	STD LOT NO	STD EXPIRA- TION DATE

AUTO TEMP COMPENSATED METER \_\_\_\_

MANUAL TEMP COMPENSATED METER \_\_\_\_

CORRECTION FACTOR APPLIED? Y N

CORRECTION FACTOR= \_\_\_\_\_

FIELD READING # 1 \_\_\_\_\_ # 2 \_\_\_\_\_ # 3 \_\_\_\_\_ # 4 \_\_\_\_\_ # 5 \_\_\_\_\_ **MEDIAN:** \_\_\_\_\_ μS/cm REMARK \_\_\_\_\_ QUALIFIER \_\_\_\_\_

**DISSOLVED OXYGEN** Meter MAKE/MODEL \_\_\_\_\_ S/N \_\_\_\_\_ Probe No. \_\_\_\_\_

Sample: FLOW-THRU CHAMBER SINGLE POINT AT \_\_\_\_\_ ft blw LSD VERTICAL AVG. OF \_\_\_\_\_ POINTS BOD BOTTLE Stirrer Used? Y N

Air Calibration Chamber in Water \_\_\_\_\_ Air-Saturated Water \_\_\_\_\_ Air Calibration Chamber in Air \_\_\_\_\_ Winkler Titration \_\_\_\_\_ Other \_\_\_\_\_

Battery Check: REDLINE \_\_\_\_\_ RANGE \_\_\_\_\_ Thermistor Check? Y N (date) \_\_\_\_/\_\_\_\_/\_\_\_\_ Barometer Calibrated? Y N

WATER TEMP °C	BAROMETRIC PRESSURE mm Hg	DO TABLE READING mg/L	SALINITY CORR. FACTOR	DO BEFORE ADJ.	DO AFTER ADJ.

Zero DO Check? Y N Solution Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Zero DO Reading \_\_\_\_\_ mg/L Adj. to \_\_\_\_\_ mg/L

Membrane Changed? N Y Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Time: \_\_\_\_\_

FIELD READING # 1 \_\_\_\_\_ # 2 \_\_\_\_\_ # 3 \_\_\_\_\_ # 4 \_\_\_\_\_ # 5 \_\_\_\_\_ **MEDIAN:** \_\_\_\_\_ mg/L REMARK \_\_\_\_\_ QUALIFIER \_\_\_\_\_

## TURBIDITY CALIBRATION

Meter: MAKE/MODEL \_\_\_\_\_ S/N \_\_\_\_\_ Type: TURBIDIMETER SUBMERSIBLE SPECTROPHOTOMETER

Sample: PUMP DISCHARGE LINE FLOW-THRU CHAMBER SINGLE POINT AT \_\_\_\_\_ ft BLW LSD SAMPLE STORED? Y N HOW LONG? \_\_\_\_\_

SAMPLE DILUTED? Y N VOL. OF DILUTION WATER \_\_\_\_\_ mL SAMPLE VOLUME \_\_\_\_\_ mL NTU =  $A \times (B+C) / C$ A= NTU IN DILUTED SAMPLE  
B= VOLUME OF DILUTION WATER, mL  
C= SAMPLE VOLUME, mL

	Date Prepared	Concentration NTU	Temperature °C	Initial instrument reading	Reading after adjustment
Stock Turbidity Standard					
Zero NTU Standard (DIW)					
Standard 1					
Standard 2					
Standard 3					

COMMENTS: \_\_\_\_\_

FIELD READING #1 \_\_\_\_\_ READING #2 \_\_\_\_\_ READING #3 \_\_\_\_\_ READING #4 \_\_\_\_\_ READING #5 \_\_\_\_\_ MEDIAN \_\_\_\_\_ NTU

## MICROBIOLOGY

## FECAL COLIFORM

Time collected: \_\_\_\_\_

time in: \_\_\_\_\_ date \_\_\_\_/\_\_\_\_/\_\_\_\_

time out: \_\_\_\_\_ date \_\_\_\_/\_\_\_\_/\_\_\_\_

## TOTAL COLIFORM

Time collected: \_\_\_\_\_

time in: \_\_\_\_\_ date \_\_\_\_/\_\_\_\_/\_\_\_\_

time out: \_\_\_\_\_ date \_\_\_\_/\_\_\_\_/\_\_\_\_

## E. COLI

Time collected: \_\_\_\_\_

time in at 35°C: \_\_\_\_\_ date \_\_\_\_/\_\_\_\_/\_\_\_\_

time in at 44.5°C: \_\_\_\_\_ date \_\_\_\_/\_\_\_\_/\_\_\_\_

time out: \_\_\_\_\_ date \_\_\_\_/\_\_\_\_/\_\_\_\_

VOLUME mL	COUNT COL/100mL	USED IN CALC?	REMARKS*
BLANK			
BLANK			

VOLUME mL	COUNT COL/100mL	USED IN CALC?	REMARKS*
BLANK			
BLANK			

VOLUME mL	COUNT COL/100mL	USED IN CALC?	REMARKS*
BLANK			
BLANK			

INCUBATE 24 hrs @44.5 °C FILTER SIZE=0.7 µM

IDEAL COUNT= 20-60 COL/100mL

RESULT (31625) \_\_\_\_\_ COL/100 mL

\*REMARK \_\_\_\_\_ \*\*QUALIFIER \_\_\_\_\_

\*REMARKS E=ESTIMATED  
<=LESS THAN >=GREATER THAN

\*\*QUALIFIERS K=COUNTS OUTSIDE ACCEPTABLE RANGE

INCUBATE 24 hrs @35 °C FILTER SIZE=0.45 OR 0.7 µM

IDEAL COUNT= 20-80 COL/100mL

RESULT (31501) \_\_\_\_\_ COL/100 mL

\*REMARK \_\_\_\_\_ \*\* QUALIFIER \_\_\_\_\_

\*REMARKS E=ESTIMATED  
<=LESS THAN >=GREATER THAN

\*\*QUALIFIERS K=COUNTS OUTSIDE ACCEPTABLE RANGE

INCUBATE [SEE NFM] FILTER SIZE=0.45 µM

IDEAL COUNT= [SEE NFM]

RESULT ( ) \_\_\_\_\_ COL/100 mL

\*REMARK \_\_\_\_\_ \*\*QUALIFIER \_\_\_\_\_

\*REMARKS E=ESTIMATED  
<=LESS THAN >=GREATER THAN

\*\*QUALIFIERS K=COUNTS OUTSIDE ACCEPTABLE RANGE

Comments: \_\_\_\_\_

## STN NO \_\_\_\_\_

STN NO \_\_\_\_\_

[illegible]

PARAMETER	STABILITY CRITERIA*
PH	$\pm 0.1$ UNITS ( $\pm 0.05$ UNITS IF INSTRUMENT DISPLAYS 2 OR MORE DIGITS TO THE RIGHT OF THE DECIMAL)
TEMPERATURE	$\pm 0.2^{\circ}\text{C}$ (THERMISTOR)
SPECIFIC ELECTRICAL CONDUCTANCE (SC)	$\pm 5\%$ , OF $\text{SC} \leq 100\ \mu\text{S}/\text{cm}$ $\pm 3\%$ , FOR $\text{SC} > 100\ \mu\text{S}/\text{cm}$
DISSOLVED OXYGEN (DO)	$\pm 0.3\ \text{mg/L}$
TURBIDITY (TU)	$\pm 10\%$ , FOR $\text{TU} < 100\ \text{NTU}$ : AMBIENT TU IS $< 5\ \text{NTU}$ FOR MOST GROUND-WATER SYSTEMS (VISIBLE TU $> 5\ \text{NTU}$ )

\* ALLOWABLE VARIATION BETWEEN 5 OR MORE SEQUENTIAL FIELD-MEASUREMENT VALUES

Notes, Calculations	



## QUALITY-CONTROL INFORMATION

## LOT NUMBERS

PRESERVATIVES 7.5N HNO<sub>3</sub> (FOR METALS & CATIONS) \_\_\_\_\_ 4.5N H<sub>2</sub>SO<sub>4</sub> (FOR NUTRIENTS & DOC) \_\_\_\_\_

1:1 HCl (FOR VOC) \_\_\_\_\_ Number of drops of HCL added to lower pH to ≤ 2 \_\_\_\_\_ ( NOTE: Maximum number of drops = 6 )

COMMENTS \_\_\_\_\_

SPIKE VIALS (99104) \_\_\_\_\_ SURROGATE VIALS \_\_\_\_\_

## BLANK WATER

INORGANIC (99200) \_\_\_\_\_ 2nd INORGANIC (99201) \_\_\_\_\_

PESTICIDE (99202) \_\_\_\_\_ 2nd PESTICIDE (99203) \_\_\_\_\_

VOC (99204) \_\_\_\_\_ 2nd VOC (99205) \_\_\_\_\_

DATE RECEIVED BLANK FROM NWQL(99109) \_\_\_\_\_ DATE TRIP BLANK SHIPPED TO NWQL(99110) \_\_\_\_\_

FILTERS CAPSULE \_\_\_\_\_ PLATE \_\_\_\_\_ ORGANIC CARBON \_\_\_\_\_ OTHER \_\_\_\_\_

(Circle appropriate selections)

## 99100 Blank-solution type

- 10 Inorganic grade (distilled/deionized)  
 40 Pesticide grade (OK for DOC)  
 50 Volatile-organic grade (OK for pesticides and DOC)  
 200 Other

## 99101 Source of blank water

- 10 NWQL  
 80 Ocala Water Quality & Research Lab

## 99102 Blank-sample type

- 1 Solution  
 30 Trip  
 80 Equipment (done in non-field environment)  
 100 Field

## 99105 Replicate-sample type

- 20 Sequential

## 99106 Spike-sample type

- 10 Field

## 99107 Spike-solution source

- 10 NWQL

## 99108 Spike-solution volume, mL \_\_\_\_\_

## 99111 QC sample associated with this environmental sample

- 1 No associated QA data  
 10 Blank  
 30 Replicate sample  
 40 Spike sample  
 100 More than one type of QA sample  
 200 Other

## REFERENCE LIST FOR CODES USED ON THIS FORM

## Sample Medium Codes

- 6 Regular Ground water  
 S Quality-control sample (associated environmental sample -6 (GW))  
 For replicates and spikes  
 Q Blanks

## Sample Type Code

- 9 Regular  
 7 Replicate  
 2 Blank  
 1 Spike

## 71999 Sample purpose

- 10 Routine  
 15 NAWQA - National Water-Quality Assessment  
 50 GW Network  
 110 Seepage Study  
 120 Irrigation Effects  
 130 Recharge  
 140 Injection

## NWIS Lot number (5 digits maximum)

## 99104

list of organic spike-kit lot numbers

## Inorganic grade; list of IBW lot numbers

99200 (1st) 99201 (2nd)

## Pesticide grade; list of OBW lot numbers

99202 (1st) 99203 (2nd)

## VOC grade; list of OBW lot numbers

99204 (1st) 99205 (2nd)

## 99104 less preferred

- list of IBW lot numbers;  
 list of OBW lot numbers

## 99109 Start Date = YMMDD

date blank  
 received from NWQL

## 99110 End Date = YMMDD

date trip  
 blank shipped to NWQL

## Value Qualifiers

- e see field comment  
 f sample field preparation problem  
 k counts outside the acceptable range

## Null-value Qualifiers

- e required equipment not functional or available  
 f sample discarded; improper filter used  
 o insufficient amount of water

## 50280 Purpose of site visit

- 2001 Primary (primary samples should not exist for a site for more than one date per HIP, and the primary sampling date generally has the highest number of NAWQA analytes)  
 2002 Supplemental (to fill in missing schedules not sampled or lost)  
 2003 Temporal characterization (for previously sampled schedules; includes LIP and seasonal samples)  
 2004 Resample (to verify questionable concentrations in primary sample)  
 2098 NAWQA QA/QC, Ground Water  
 2099 Other (ground-water related samples with medium code other than "6", such as soil samples or core material)

## REFERENCE LIST FOR CODES USED ON THIS FORM, cont'd

00003 Pump depth, ft blw LSD  
00059 Sampling flow rate, GPM  
72004 Pump or flow period prior to sampling, minutes  
72019 Water level, ft blw LSD

### 72006 Sampling Condition

- 0.01 The site was dry (no water level is recorded)
- 0.02 The site had been flowing recently
- 0.03 The site was flowing, head could not be measured
- 0.04 A nearby site that taps the Aquifer was flowing
- 0.05 Nearby site tapping same Aquifer had been flowing recently
- 0.06 Injector site
- 0.07 Injector site monitor
- 0.08 Measurement discontinued
- 0.09 Obstruction encountered in well above water surface
- 0.10 The site was being pumped
- 0.11 The site had been pumped recently
- 0.12 Nearby site tapping the same Aquifer was being pumped
- 0.13 Nearby site tapping the Same Aquifer was pumped recently
- 0.14 Foreign substance present on the surface of the water
- 0.16 Water level affected by stage in nearby site
- 0.17 Other conditions affecting the measured water level
- 2 Undesignated
- 4 Flowing
- 6 Flowing on gas lift
- 8 Pumping
- 10 Open hole
- 18 Producing
- 19 Circulating
- 22 Lifting
- 23 Flowing to Pit
- 24 Water Flooding
- 25 Jetting
- 30 Seeping
- 31 Nearby well pumping
- 32 Nearby well taking water
- 33 Well taking water

### ALKALINITY/ANC PARAMETER CODES

- 39086 Alkalinity, water, filtered, incremental titration, mg/L
- 00410 ANC, water, unfiltered, incremental titration, mg/L
- 29802 Alkalinity, water, filtered, Gran titration, mg/L
- 29813 ANC, water, unfiltered, Gran titration, mg/L

### Time Datum Codes

	Std Time	UTC Offset	Daylight Time	UTC Offset
Time Zone	Code	(hours)	Code	(hours)
Hawaii-Aleutian	HST	-10	HDT	-9
Alaska	AKST	-9	AKDT	-8
Pacific	PST	-8	PDT	-7
Mountain	MST	-7	MDT	-6
Central	CST	-6	CDT	-5
Eastern	EST	-5	EDT	-4
Atlantic	AST	-4	ADT	-3

### 82398 Sampling method

- 4010 Thief sampler
- 4020 Open-top bailer
- 4025 Double-valve bailer
- 4030 Suction pump
- 4040 Submersible pump
- 4045 Submersible multiple impeller (turbine) pump
- 4050 Squeeze pump
- 4060 Gas reciprocating pump
- 4070 Gas lift
- 4080 Peristaltic pump
- 4090 Jet pump
- 4100 Flowing well
- 4110 Resin trap collector
- 8010 Other

### 84164 Sampler type

- 4010 Thief Sampler
- 4020 Open-top Bailer
- 4025 Double-valve Bailer
- 4030 Suction Pump
- 4035 Submersible Centrifugal Pump
- 4040 Submersible Positive-pressure Pump
- 4041 Submersible Helical Rotor Pump
- 4045 Submersible Gear Pump
- 4050 Bladder Pump
- 4060 Gas Reciprocating Pump
- 4070 Gas Lift
- 4075 Submersible Piston Pump
- 4080 Peristaltic Pump
- 4090 Jet pump
- 4095 Line-Shaft Turbine Pump
- 4100 Flowing Well
- 8010 Other

### GWSI—Water Level Status

- Leave blank If water level measured represents a static level, leave this field blank
- A Atmospheric Water level affected by atmospheric pressure
- B Tide Stage Water level affected by tide stage
- D Dry Site was dry (no water level is recorded)
- E Recently flowing Site was flowing recently
- F Flowing Site was flowing and the head could not be measured (no water level is recorded)
- G Nearby flowing Nearby site that taps the same aquifer was flowing
- H Nearby recent flow Nearby site that taps the same aquifer had been flowing recently
- I Injector site Injector site (recharge water being injected into the aquifer)
- J Injector monitor Injector site monitor (a nearby site that taps the same aquifer is injecting recharge water)
- M Plugged Well plugged and not in hydraulic contact with formation
- N Discontinued Measurement discontinued
- O Obstruction Obstruction was encountered in the well above the water surface (no water level recorded)
- P Pumping Site was being pumped
- R Recently pumped Site had been pumped recently
- S Nearby pumping Nearby site that taps the same aquifer was being pumped
- T Nearby recently pumped Nearby site that taps the same aquifer had been pumped recently
- V Foreign substance Foreign substance present on the surface of the water
- W Destroyed Well destroyed (no water level recorded)
- X SW effects Water level affected by stage in nearby surface-water site
- Z Other Other conditions that would affect the measured water level (explain in remarks)

### GWSI—Water Level Method

- A Airline Airline measurement
- B Recorder Analog or graphic recorder
- C Calib. airline Calibrated airline measurement
- E Estimated Estimated
- F Transducer Transducer
- G Pressure-gage Pressure-gage measurement
- H Calib. Pres. Gage Calibrated pressure-gage measurement
- L Geophysical log Interpreted from geophysical logs
- M Manometer Manometer measurement
- N Nonrec. Gage Nonrecording gage
- R Reported Reported, method not known
- S Steel tape Steel-tape measurement
- T Electric tape Electric-tape measurement
- V Calib. Elec. Tape Calibrated electric-tape measurement
- Z Other Other

A COMPLETE SET OF FIXED-VALUE CODES CAN BE FOUND ON-LINE AT:

[http://www.nwis.er.usgs.gov/nwisdocs4\\_3/qw/QW.user.book.html](http://www.nwis.er.usgs.gov/nwisdocs4_3/qw/QW.user.book.html)